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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,328	04/20/2001	Ingvar Claesson	0104-0328P	1022

2292 7590 02/27/2003

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EXAMINER

TSAI, HENRY

ART UNIT	PAPER NUMBER
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2183

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/838,328

Applicant(s)

CLAESSON ET AL.

Examiner

Henry W.H. Tsai

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/20/02.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 20 December 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

Art Unit: 3722

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

2. Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Redmond et al. (5,913,955).

Redmond et al. discloses the claimed invention comprising, as shown in Fig. 2, a control unit and converting means which are connectible to the control unit and comprise a vibration sensor and an actuator(A21, A22), and the actuator comprising an active element(A21, A22), which converts an A.C. voltage supplied by the control unit to the actuator(A21, A22) into dimensional changes, wherein said active element is adapted to be embedded in the body of the tool holder(B2, see also Col. 1, line 12, as a boring bar), and wherein said active element is adapted to be embedded in such manner that said dimensional changes impart turning moments to the body of the tool holder(B2).

Art Unit: 3722

Note Redmond et al. also discloses the limitations described in claims 2-25, such as said active element(A21, A22) is adapted to be embedded with its center axis spaced from the center axis of the tool holder(B2); said active element(A21, A22) is adapted to be embedded close to the surface of the tool holder; said tool holder(B2) being elongated and having an end portion which is adapted to be received in a mounting recess of the machine, wherein said active element is positioned along the tool holder(B2) such that, when the tool holder is held in said recess, a portion of said active element is within said recess; said portion of said active element consists of approximately half of said active element as shown in Fig. 2. Note Redmond et al.'s the active element inherently is a piezoceramic element, see Col. 3, lines 10-11.

Claim Rejections - 35 USC § 103

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Redmond et al. in view of Lazarus et al. (5,687,462).

Redmond et al. discloses the claimed invention except for: explicitly showing the active element being a piezoceramic element.

Art Unit: 3722

Lazarus et al. discloses a cutting device comprising the active element being a piezoceramic element(112) as shown in Fig. 2B.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Redmond et al.'s device to comprise the active element being a piezoceramic element, as taught by Lazarus et al., in order to facilitate precisely effecting the reduction of vibration for the Redmond et al.'s tool during the machining process.

Response to Amendment

4. Applicant's arguments mailed 12/20/02 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Henry Tsai whose telephone number is (703) 308-7600. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Eddie Chan, can be reached on (703) 305-9712. Any inquiry of a general nature or relating to the

Art Unit: 3722

status of this application or proceeding should be directed to the TC 2100 receptionist whose telephone number is (703) 305-3900.

6. In order to reduce pendency and avoid potential delays, Group 2100 is encouraging FAXing of responses to Office actions directly into the Group at fax number:

Official faxes: 703-746-7239; and

After Final faxes: 703-746-7238;

Customer Service faxes: 703-746-7240.

This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2100 will be promptly forward to the examiner.



**HENRY W. H. TSAI
PRIMARY EXAMINER**

February 24, 2003